

## Read Velocity Data



Use the matching sheet ID when checking answers.

Use the material to work through each task. Show the requested response.

1. What is velocity at 2 seconds?

Answer: 6 m/s

2. How much does velocity change from 0 to 3 seconds?

Answer: 6 m/s

3. Find average acceleration over those 3 seconds.

Answer: 2 m/s<sup>2</sup>

4. If the same acceleration continues, what velocity is predicted at 4 seconds?

Answer: 10 m/s

5. What does slope in a velocity-time graph represent?

Look for:

- Gives the correct quantity and relationship.

One possible response: Acceleration: change in velocity per unit time.

6. Why must the prediction state that acceleration continues?

Look for:

- States the model assumption.

One possible response: The earlier data alone do not guarantee future motion.

Open responses use criteria and an illustrative response. Other well-supported responses can be acceptable.